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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,663	08/21/2003	Katsuhiro Onuki	1-16254	9930

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EXAMINER

KING, BRADLEY T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,663

Applicant(s)

ONUKE ET AL. *ST*

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP2000-184686.

JP 2000-184686 discloses all the limitations of the instant claims including: a guide rail 25; a table 3 including a slider (31, 53) which is guided by said guide rail for a motion along a length said guide rail, said slider comprising a moveable slide block 37 that is adapted to slide along a surface of said guide rail and is supported by said slider so as to be moveable toward and away from said guide rail surface; a linear motor (10, 2) for actuating said table along said guide rail; and a power actuator 34 for selectively moving said moveable slide block toward said guide rail surface; said moveable slide block sliding over said guide rail surface for a guiding action in a first state of said power actuator and bearing upon said guide rail surface for braking action in a second state of said power actuator.

Regarding claim 3, JP 2000-184686 discloses a solenoid 36 and a spring member 39.

Regarding claim 4, JP 2000-184686 discloses a pair of parallel guide rail members (21, 25) and a pair of laterally arranged sliders (31, 53). See figure 5.

Regarding claim 8, JP 2000-184686 discloses a bearing member 40.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000-184686 in view of Kato et al (US# 2003/0062227).

Regarding claim 9, JP 2000-184686 discloses all the limitations of the instant claim with exception to the explicit disclosure of the static friction coefficient in the range of .15 to .25. Kato et al disclose a similar braking apparatus and further illustrates that it is known to optimize the coefficient of friction of bearing/ brake members to provide appropriate stopping forces and minimize abrasion damage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine through routine experimentation and optimization the appropriate friction coefficient to provide adequate stopping forces and minimal wear and abrasion for a given application. Also note *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235

(CCPA 1955).

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Regarding claim 10, JP-2000-184686 discloses all the limitations of the instant claim with exception to the specific material composition for the bearing elements. Kato et al disclose a similar braking system and further teach the use of a porous carbon material prepared by sintering a mixture of plant base carbon and phenol resin. See paragraph [0060]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select a porous carbon such as taught by Kato et al for the bearing element of JP 2000-184686 to reduce abrasion damages, thereby increasing the durability of the device. Also note *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Allowable Subject Matter

Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 08/30/2004 have been fully considered but they are not persuasive.

It is maintained that JP 2000-184686 discloses the claim limitations as set forth above. Applicant's arguments that the brake base and slide block of the reference would always be in contact during normal operation are contradictory to the disclosure

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of the reference (also note figure 5). Both the figures and the disclosure clearly show that the brake is maintained at a distance from the base 25 during normal operation. While applicant contends that the reference could not function properly, it is maintained that one skilled in the art could make and use the invention such that it operates as disclosed. Also note MPEP 716.07 and 2121. Regarding the sliding function of the slide block, it is maintained that the slide block of JP 2000-184686 slides or moves smoothly across the guide rail surface as broadly defined by the claims. Also note that, depending on the level of activation, the moveable block will contact the guide rail. It is maintained that the rejections are proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

Robert A. Siconolfi 11/28/04
ROBERT A. SICONOLFI
PATENT EXAMINER